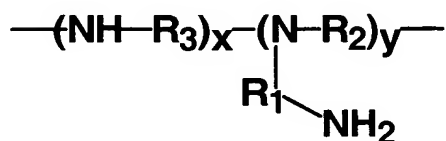


**WHAT IS CLAIMED IS:**

1. A developer comprising a developing agent and a polyalkyleneimine antioxidant being formed by the condensation of a number of alkyleneimine units and having the following formula (I):



(I)

wherein R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> independently represent an unsubstituted or substituted alkylene group or R<sub>2</sub> may be H;

x and y independently represent an integer from 1 to 39,999;

the sum of x and y represents an integer from 10 to 40,000; and

wherein the amine groups of the antioxidant have been partially oxidized with hydrogen peroxide or a compound capable of generating hydrogen peroxide prior to introduction of said developing agent.

2. A developer as claimed in claim 1 wherein at least one of R<sub>2</sub> and/or R<sub>3</sub> is an ethylene group such that the compound of formula (I) is a polyethyleneimine.

3. A developer as claimed in claim 1 wherein at least one of the alkylene groups is substituted with at least one member selected from the group consisting of a hydroxy group, a carboxy group or a sulfo group or with one or more unsubstituted or substituted alkyl groups.

4. A developer as claimed in claim 1 wherein at least one of the alkylene groups comprises a cyclic structure.

5. A developer as claimed in claim 1 wherein the sum of x and y in the formula represents an integer in the range from 500 to 40,000.

6. A developer as claimed in claim 5 wherein the sum of x and y in the formula represents an integer in the range from 1,000 to 40,000

7. A developer as claimed in claim 1 wherein the developer  
5 comprises a colour developer.

8. A developer as claimed in claim 1 wherein the amine groups of the antioxidant have been partially oxidized to form hydroxylammonium groups, such that the amount of hydroxylammonium groups formed is less than half the  
10 total equivalent of the amine groups of the antioxidant before the introduction of the developing agent.

9. A developer as claimed in claim 8 wherein the amine groups of the antioxidant have been partially oxidized to form hydroxylammonium groups  
15 such that the amount of hydroxylammonium groups formed is less than one quarter of the total equivalent of the amine groups of the antioxidant before the introduction of the developing agent.

10. A developer as claimed in claim 1 wherein the amine groups of  
20 the antioxidant have been oxidized for at least half an hour before the introduction of the developing agent.

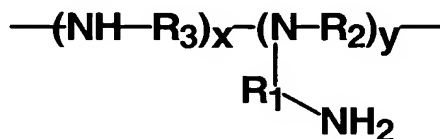
11. A developer as claimed in claim 1 wherein the compound capable of generating hydrogen peroxide comprises at least one member selected  
25 from the group consisting of hydrogen peroxide, alkali metal peroxides, alkali metal perborates, alkali metal percarbonates, alkali metal perphosphates, alkali metal persulfates, organic peroxides or urea:peroxide complexes.

12. A developer as claimed in claim 1 wherein the developing agent comprises at least one member selected from the group consisting of a p-phenylenediamine, a hydroquinone, an aminophenol, a pyrazolidinone, a sulfonhydrazide or a hydrazine.

5

13. A developer as claimed in claim 1 which also comprises an alkaline buffer.

10 14. A method of making a developer comprising partially oxidizing the amine groups of a polyalkyleneimine antioxidant with hydrogen peroxide or a compound capable of generating hydrogen peroxide and mixing said antioxidant with a developing agent, said polyalkyleneimine antioxidant having been formed by the condensation of a number of alkyleneimine units and having the following formula (I):



15

(I)

wherein  $\text{R}_1$ ,  $\text{R}_2$  and  $\text{R}_3$  independently represent an unsubstituted or substituted alkylene group or  $\text{R}_2$  may be H;

x and y independently represent an integer from 1 to 39,999;

20

the sum of x and y represents an integer from 10 to 40,000.